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| APPLICATION NO.                       | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/695,031                            | 10/28/2003  | Melvin Jokela        | 2487.003US1         | 5660             |
| 21186                                 | 7590        | 02/02/2006           | EXAMINER            |                  |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH |             |                      |                     | HON, SOW FUN     |
| 1600 TCF TOWER                        |             |                      |                     |                  |
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|                                       |             |                      |                     | ART UNIT         |
|                                       |             |                      |                     | PAPER NUMBER     |
|                                       |             |                      |                     | 1772             |

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/695,031             | JOKELA ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Sow-Fun Hon            | 1772                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 November 2005.
- 2a) This action is **FINAL**.                                   2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 and 12-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 10 and 12-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Response to Amendment***

***Election/Restrictions***

1. Applicant's election without traverse of claims 10, 12-27 in the reply filed on 11/30/05 is acknowledged.

***Withdrawn Rejections***

2. The 35 U.S.C. 112, 2<sup>nd</sup> paragraph rejections have been withdrawn due to Applicant's cancellation of claim 11, amendment of claim 16, and further review of claims 17 and 20 made clear that when the binder in the first brightener film includes 10 parts PVAc and 9 parts SBR, total parts of the binder then equaling 19 parts, and the binder in the second brightener film includes about 12 parts PVAc and 12 parts SBR, total parts of the binder equaling 24 parts, then, because the total parts of the binder in the first film is less than the total parts of binder in the second film, the balance which includes calcium carbonate for the first film must necessarily be more than the balance which includes calcium carbonate for the second film. Claim 15 was not rejected under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, and claims 15, 17 were not amended.

3. The 35 U.S.C. 103(a) rejection of claims 24-25 over Nelli has been withdrawn due to Applicant's amendment of said claims to remove the optional language to recite the optical component of a second brightener film.

***Response to Arguments***

4. Applicant's arguments filed 11/30/05, over the combination of Shanton in view of Nelli, have been fully considered but they are not persuasive.

5. Applicant argues that Shanton teaches a preferred base coat pigment mixture of 80 parts kaolin clay and 20 parts calcium carbonate (column 4, lines 43-45), and therefore teaches that the calcium carbonate in a first amount in the brightener film is less than the brightener particles in a second amount in the first brightener film.

Applicant is respectfully apprised that Shanton is the primary reference that teaches that the second brightener film (top coat 16, column 4, lines 1-5) is coated directly ontop of the first brightener film (base coat 14, which is coated directly on paperboard substrate 12, column 4, lines 1-5). Nelli is the secondary reference that teaches a paperboard substrate (linerboard, column 2, lines 35-40) coated with a first film which includes a preferred mixture of calcium carbonate in a first amount of 47% which is more than the brightener particles in a second amount (4 % clay and 15 % titanium oxide, column 2, lines 65-68). Nelli teaches that the first film has high water absorbency to aid in the ink drying process (formulation, column 2, lines 35-40) when the next brightener (ink) layer is applied, and maintains the brightness of the multicolor graphics even after a finish third film (wax) has been applied over the second brightener film (ink layer, column 3, lines 10-15). Thus, Nelli provides the motivation to modify Shanton, by teaching that the first brightener film above the paperboard substrate has high water absorbency when it includes calcium carbonate in a first amount which is more than the brightener particles in a second amount, in order to provide the second brightener film ontop of it, with a faster drying rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used the first brightener film of Nelli, which includes more calcium carbonate than brightener particles, in place of the first brightener film of Shanton, which includes less

calcium carbonate than brightener particles, in order to provide the second brightener film of Shanton with a faster drying rate, while maintaining the desired brightness of the second brightener film of Shanton which is ontop of the first brightener film, even after a wax finish film has been applied over the second brightener film, as taught by Nelli.

6. Applicant argues that Shanton teaches away from what is claimed as preferred since Shanton teaches that the first brightener film is a preferred base coat pigment, which is 80 parts kaolin clay and 20 parts calcium carbonate (column 4, lines 43-45).

Applicant is respectfully apprised that Shanton does not expressly teach against the use of a base coat pigment which has more calcium carbonate than brightener particles because Shanton teaches that although the forgoing pigments are preferred as components (column 5, lines 65-67), kaolin clay and calcium carbonate being a particulate pigment mixture (column 5, lines 39-42), other pigments comprising calcium carbonate, could be used alone or in combination with other pigments (column 6, lines 1-9). Nelli provides the motivation to modify Shanton, by teaching that the first brightener film above the paperboard substrate has high water absorbency when it includes calcium carbonate in a first amount which is more than the brightener particles in a second amount (formulation, column 2, lines 35-40), in order to provide the second brightener film ontop of it, with a faster drying rate (ink layer, column 3, lines 10-15).

7. Applicant argues that Shanton fails to teach a third finish film.

Applicant is respectfully apprised that Nelli is the secondary reference that teaches that a third finish film of wax is provided (converted carton is coated with wax, column 1, lines 25-30) for the purpose of providing the laminate with the finish properties of the wax.

8. Applicant's arguments against the combination of Shanton in view of Nelli and further in view of Kinsey are directed against the primary combination of Shanton in view of Nelli, and have been addressed above.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*S. Hon.*

Sow-Fun Hon

*01/27/05*

*Harold Pyon*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1792*

*1/3/06*